

Rhythm 3

MAVLINK fully compatible



3-Axis payload, 3-Optical sensors camera

High-Precision 6-Axis MEMS MotionTracking® IMU

30x Optical zoom with SONY@FPSR(Full Pixel Super-Resolution Imaging Technology)

90x Hybrid zooming without quality lose

720x Hybrid max zooming

640*512 30Hz 9.1mm Radiometric EI camera

Support 1.2 KM target range finder

Support target location process

Onboard Nvidia Xavier NX edge computer

Inspection



Surveillance



Rescue



Specifications

Weight	815g
Size	150*112*153mm
IP rating	IP44
Power input	24V, 10W to 24W
Operating Temperature	-10°C to 50°C
Gimbal control range	Pitch: -90° to +20° Pan: 360° limitless
Mount type	P-Mount
Min control accuracy	1°
Angel control accuracy	±0.01°
Stream link	rtsp://192.168.2.119:8554/eo (ir)
File servicer	Support
Geo-tag	Support
Target location processing	Support
Protocol	MAVLINK 2.0

Edge computing performance

SOM	Nvidia Jetson Xavier NX 16G
AI performance	21 TOPS (INT8)
GPU	384-core NVIDIA Volta GPU with 48 Tensor Cores
GPU Max Freg	1100 MHz
CPU	6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6MB L2 + 4MB L3
CPU Max Freg	2-core @ 1900MHz; 4/6-core @ 1400Mhz
Memory	8GB 128-bit LPDDR4x; 59.7GB/s
Storage	16 GB eMMC 5.1

EO camera

Sensor	4K SONY 1/2.5 Exmor R CMOS Sensor (8.51MP)
Recommended illumination	100 to 100,000 lx
Lens	f = 4.4 mm to 88 mm; F2.0 to F3.8
Horizontal Viewing Angel	Approx. 70.2° to 4.1° (Image stabilizer OFF) Approx. 60.0° to 3.5° (Image stabilizer ON)
Zooming	30x optical zoom with SONY@FPSR (Full Pixel Super-Resolution Imaging Technology) 90x Hybrid zooming without quality lose 720x Hybrid max zooming
Focus	MF/AF-C/AF-S
EV compensation	Auto/Manual -10.5 to +10.5 dB
Noise reduction	6 steps (3DNR , 2DNR 3DNR separate mode)
Spot AE	Point support
Electronic shutter speed	1 to 1/10000 sec.
ISO	Auto/Manual 500~128000
Video resolution	3840×2160@30fps, 20-40M
Video format	mp4
Image quality	3840x2160
Image format	Jpeg
Storage temperature/ Humidity	-20°C to 60°C/20% to 95%
Operating temperature/ Humidity	-5°C to 60°C/20% to 80%

EI camera

Type	Uncooled VOx Microbolometer (VOx)
Lens	Focal length: 9.1 mm(equivalent:40mm) FOV 48°×38°, DFOV: 61° , F1.0
Video resolution	640*512 @ 30 Hz
Video format	mp4
Image quality	640*512
Image format	R-JPEG
Pixel pitch	12 um
NETD	≤50mK @25°C
Temperature Measurement Method	Spot /Area Measurement
Palette	White hot/Fulgurite /Iron Red/Hot Iron/Medical/ Arctic/Rainbow 1/Rainbow 2/Tint/Black Hot
Temperature Measurement Range	High Gain: -40°C to 150°C Low Gain: -40°C to 550°C
Temperature Measurement Accuracy	±3°C or ±3% @ working temperature -20°C~60°C
Operating Temperature	-40°C~80°C (-20°C~60°C Radiometric)

Range finder

Wave	905nm (Class 1)
Measure range	5-1200 m(> D=12 m, 20% reflection rate)
Measure accuracy	6-60m ±1m, 70-100m±1.5m 110-400m±2m, 400m above±0.4%m
Laser angle	4~10 mrad
Measure HZ	≤1 Hz
Laser output size	6 mm
Reception size	17 mm

Rhythm 2L

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